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ABSTRACT

This literature review discusses four aspects of professional development schools (PDSs) that either arose with great frequency in the literature or that seemed to be most relevant to the partnership between the Santa Monica-Malibu Unified School District and the University of California, Los Angeles. The four aspects are collaboration, teacher training, funding, and evaluation. Over 100 books and articles having PDSs as their main topic were examined. This paper is in six sections. The first section introduces the methodology and terminology. Section 2 examines collaboration, including the problems and pitfalls (priorities, status of PDS activities, calendars, and uses of time) and rewards and coping strategies (research and teaching, changing roles, and time and compensation). Section 3 explores teacher training, including mentoring, isolation and status, new teachers' contributions, diversity in selection and placement, and improving teacher training. Section 4 looks at funding; section 5 covers evaluation, including examples. Section 6 reports on upcoming publications. (Contains 100 references.) (ND)

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RUNNING HEAD: PDS Lit Review

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Professional Development Schools/
School-University Partnerships:
A Review of the Literature (1990-1996)

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Table of Contents

I.	Introduction	3
	A Note on Methodology and Terminology	5
II.	Collaboration	6
	Problems and Pitfalls	6
	1. Different Priorities: Research and Teaching	6
	2. Low Status of PDS Activities	7
	3. Different Calendars and Use of Time	8
	Rewards and Coping Strategies	8
	1. Joining Research and Teaching	8
	2. Changing Roles	9
	3. Time and Compensation	10
III.	Teacher Training	12
	Weaknesses of Teacher Training	12
	1. Inadequate Mentoring	12
	2. Isolation and Status	14
	3. Raw Material	14
	4. Diversity in Selection and Placement	15
	Improving Teacher Training	16
IV.	Funding	18
	The Prospects for PDS Funding	19
V.	Evaluation	21
	Examples of Evaluation	23
VI.	Literature on the Horizon	24
	References	26

PROFESSIONAL DEVELOPMENT SCHOOLS/SCHOOL-UNIVERSITY
PARTNERSHIPS: A REVIEW OF THE LITERATURE (1990 - 1996)

I. Introduction

School-university partnerships have multiplied as a tremendous rate since they began as part of the national education reform efforts of the 1980s. The most comprehensive directory of the partnership movement (Wilbur and Lambert, 1995), sponsored by the American Association for Higher Education (AAHE), lists 2,322 programs all over the country, up from the 750 identified in the 1986 directory.

The subset of the movement which is the subject of this literature review is partnerships involving professional development schools (PDSs), most often referring to the substantial involvement of one or several elementary and secondary schools in the preservice teacher education program of a college or university. It has been twelve years since John Goodlad called for the establishment of such schools in *A Place Called School* (1984), and eleven years since the National Network for Education Renewal, a network of PDSs, was established out of the Center for Education Renewal, University of Washington. It has been ten years since both the Holmes Group and the Carnegie Forum on Education and the Economy called for teachers to be trained in PDSs. It has been six years since the Holmes Group laid out principles for the establishment of PDSs in *Tomorrow's Schools* (1990), and eight years since the American Federation of Teachers threw its weight behind the movement, leading an effort to restructure schools to assume heavy responsibilities for clinical teacher education.

In 1984, the American Association of Colleges for Teacher Education found about 75 percent of 499 teacher-training institutions (about 374) "engaged in building partnerships with elementary/secondary schools to improve [the] quality of teaching and teacher education (Su1990). The 1995 AAHE directory lists 666 partnerships which

provide programs and services for educators, and about 325 programs that focus on development, research and evaluation of curriculum and instruction, and school restructuring efforts. Some of these partnerships can be identified with ease as professional development schools; others share one or more elements with a PDS.

It is impossible to know exactly how many professional development schools there are in the country. The term PDS has been assumed by a wide range of institutional collaborations between universities and schools. In concept and in practice, involvement can range from college educators supervising a small cadre of student teachers on-site, to "a symbiotic partnership in which school and university personnel share the decisions of operating both the school and the entire length and breadth of the teacher education program." (Goodlad, 1993). The spread of the term and concept compelled the Holmes Group to sharply criticize too many "cheap copies" of PDSs that had sprung up since their 1986 report. They cry of the Holmes Group was insistent: "The PDS is no McDonald's franchise to be set in place ready to operate simply by acquiring the proper equipment and following the rules in a manual. Sweat and tears make the PDS. It is as much a process as a place..." (The Holmes Group, 1995).

Still, the abundance of literature on the topic is evidence that the professional development school is an idea whose time came several years ago and is now with us. For this literature review over one hundred pieces of literature were read or abstracted, including several books and a number of handbooks, manuals and guides. Most partnerships seem to be in the first few years of collaboration; few would characterize themselves as being in full swing. Virtually all acknowledge the road has been difficult but rewarding, and vow to continue on the journey. At least in the literature, instances in which both college and school have decided a PDS should end because its mission has been completed, it has brought more trouble than it is worth, or the costs outweigh the benefits, are extremely rare (Clark, 1995b, p. 3; Darling-Hammond, 1995).

This literature review discusses four aspects of professional development schools that either arose with great frequency in the literature, or that seemed to be most relevant to the partnership between the Santa Monica-Malibu Unified School District and the University of California, Los Angeles: collaboration, teacher training, funding, and evaluation.

A Note on Methodology and Terminology

This review is comprehensive but not exhaustive. It includes books and articles which had PDSs as their main subject or topic. Not included, for example, are books and articles on professional development and teacher training that discuss PDSs as just one of many reform efforts. The literature review is also supplemented by a set of abstracts covering every piece of literature reviewed.

In a review of the partnership literature from 1986-1990, Su found partnerships fell into five categories by the nature of their purpose: staff-oriented, student-oriented, task-oriented, institution-oriented: "adopt-a-school" paradigm, and institution-oriented partnerships: simultaneous renewal paradigm (Su, 1990). The first four approaches tended to be one-sided efforts. That is, while they were meant to improve teaching and learning in elementary and secondary schools, they were not concerned with the restructuring of university programs. PDSs, on the other hand, are concerned with the restructuring of both school and university.

This literature review focused on the fifth category. In nature, symbiosis is a state in which two different organisms change and affect each other, derive benefit from one another, and ultimately guarantee their own continued existence. When applied to professional development schools, the relationship must be long-term, and must deal with problems that have persisted in the face of one-sided reform efforts (Su, 1990). In a professional development school, both school and university change the work and culture of the other, each derives important benefits from the other, and the long-term existence of

new ways of training and educating teachers is guaranteed. Persistent problems to be addressed include the school's lack of access to educational research and theory, the university's distance from actual school settings, and the lack of time teachers spend reflecting on their own practice.

Various terms used to refer to partnership participants appear in the literature. Novice, student, and preservice teacher are used interchangeably. Cooperating, veteran, supervising, and mentor teacher all refer to the school faculty member working with novice teachers and university personnel. University faculty members are also referred to as supervisors and professors. Professional development schools are also referred to as professional practice or clinical schools.

II. Collaboration

There is hardly a piece of literature on school-university partnerships that does not discuss the difficulties and rewards of collaboration between participants. Below are the most persistent problems of collaboration, and some of the ways in which partnerships have dealt with them.

Problems and Pitfalls

1. Different Priorities: Research and Teaching

While the work of both school and university is the education of the mind, the day-to-day work of each is different. While university professors teach some classes, their chief work is research and publication. While school faculty take college coursework and may dabble in research and publication, their chief work is to teach students.

- Professors are rewarded, with promotion, tenure, grants and professional standing, for research and publication. Teaching courses, working with school faculty, or supervising novice teachers are not priorities. School teachers are rewarded, with

popularity and personal satisfaction, for working with students, not with other teachers. With longevity, there may also be increases in pay, perks (choice of classroom, extra planning period, etc.), and promotions (department chair, etc.)

- Given curriculum frameworks and standardized tests, school faculty may have much less academic freedom than university faculty. University faculty may relish a greater freedom to engage in any number of intellectual pursuits, and perceive collaboration to bring too many limitations and constraints on this freedom.

- Because of the requirements to significantly change the way they work, and the perception that a PDS is the pet project of a few colleagues, fewer university faculty can get involved in a PDS than its organizers hope (Dixon & Ishler, 1992).

- The usual participants in a PDS are university faculty, novice teachers, and expert/supervising teachers. But other participants are involved and have their own priorities: university administrators, principals, unions, and graduate students. The varied priorities can lead to battles; the internal politics can interfere with PDS activities and drain the energy of individual participants (Snyder, 1994).

2. Low Status of PDS Activities

Both teacher education in universities, and professional development in schools, are low status activities. Research in the former, and actual teaching in the latter, are given much more priority (Darling-Hammond, 1994).

- Low status can lead to negative perceptions of PDS personnel. At a university, some faculty members can see a PDS as the pet project of a few colleagues more interested in teaching than in research and publication. Not only might many scholars not be interested in contributing to research in the PDS, but some might act to prevent the changes in hiring, reward and tenure policies necessary to make the collaboration work (Stoddart, 1993).

- At the school, some faculty members can see the PDS as according more status and privilege than deserved to novice and participating veteran teachers (Lemlech, 1994).
- Cooperative agreements are often set aside in times of school crisis, and professors and graduate students whose first priority is their own research are often seen as interlopers on the margin of the school's mission (Davis, 1995)

3. Different Calendars and Use of Time

That university and school personnel may operate on different school calendars is one part of the problem (Colburn, 1993).

- Necessary basic research that ends up in scholarly journals takes more time than applied or action research. The latter is on a shorter time frame: teachers and schools cannot or should not wait long to act on information about student performance or teaching practice. (Wintzky, Stoddart & O'Keefe, 1992).
- With separate grading and finals periods, the demands on a novice teacher taking college courses can be overwhelming. School personnel may think in terms of two semesters of work and a summer vacation. University personnel may think in terms of three quarters and a summer work period.
- Interdisciplinary, team and collaborative teaching can spur teachers to think of ways of restructuring the school's calendar. But these innovative suggestions on the part of a few teachers can be ignored or blocked by school, district and state bureaucracies.

Rewards and Coping Strategies

1. Joining Research and Teaching. The joining of professional education (coursework and research) and supervised practice (mentoring and in-service) holds the greatest rewards for collaboration (Darling-Hammond, 1994).

- What a PDS requires is a new paradigm of research and staff development that respects the expertise and meets the needs of both school and university faculty (Stoddart, 1993).

- The benefits are the supervision and modeling that is offered by the practicum, together with the guided inquiry and reflection that is possible through coursework, seminars, and conferences.

Another benefit is the personal networking and building of collegiality across organizations, beyond the formal lines of the partnership (Bercik, 1991(3)).

- In a partnership between five colleges and forty-three school systems in western Massachusetts, the informal network of professional and personal contacts, made easier by a comprehensive mailing list, avoids a situation where mailings to administrators are not passed on to teachers. (Bieda, Gibbs, & Goldie, 1990)

- Specific to the secondary school environment, a partnership between a college and a particular department of a high school may be more fruitful and productive than a partnership with a whole school (Clark & Donna, 1991).

2. Changing Roles

Traditional research is redefined. Inquiry that improves teaching practice becomes research that contributes to the scholarly literature. University-based inquiry which seeks more universal explanations and contributions to general theory is transformed into investigation of site and cohort-specific factors that leads to real recommendations and action for improvement (Murray, 1993). Action research is the term most often used to refer to this kind of work, and has been in use almost as long as PDS (Catelli, 1995).

- Work with the Norwood Professional Practice School has led University of Southern California teacher educators to adjust curriculum and methods classes, and promote initiatives to recruit and train bilingual and second language teachers. The

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symbiosis has led Norwood to restructure its curriculum and its student assessment methods (Lemlech, 1994).

- Virginia Tech's collaborations with area schools have required university faculty to redefine their roles in order to focus on leading groups of teachers in inquiry, coaching both mentor and novice teachers, and teaming with colleagues (sometimes outside the school the education) for interdisciplinary teaching (Devaney, 1993).

- The University of Connecticut's School of Education redesigned its entire teacher education program around a number of PDSs, such that nearly 75 percent of the faculty are now involved in teacher preparation, compared to 30 percent before (Case, Norlander, & Regan, 1993).

- Though it calls for individuals to sacrifice themselves for the good of the group, Snyder points out that in a PDS involving Columbia University's Teachers College and two New York schools, gains were made only when one participant or another assumed the risk of challenging his or her own institution (Snyder, 1994).

- In a partnership between the University of Utah and the Salt Lake City School District, while all university faculty are involved, a certain number are rotated in and out of the PDS teaching and leadership responsibilities. This guarantees all faculty are involved at some point, but also makes program continuity suffer (Wintzky, Stoddart & O'Keefe, 1992).

3. Time and Compensation

Adherence to school calendar is paramount (Cushman, 1993). If the chief purpose of a PDS is to train the novice teachers, the ultimate goal to increase student achievement, and the most precious resource the availability of time, the prevailing calendar should be that of the institution where the novice teachers and the students spend most of their time.

- In a partnership between San Diego State University and the Cajon Valley Union SD, teachers elected to restructure the school day and calendar to provide time for team

planning and decision-making. Thirty minutes of instructional time were added to four days of the week, and the fifth day was a minimum day that left time for staff development in collaboration with university personnel (Berg & Murphy, 1992).

- But university calendars have their benefits also. In a New York City PDS, the space in the month of January between university semesters allows teams of professors and teachers to work in interdisciplinary teams on jointly-chosen topics (Lythcott and Schwartz, 1994).

Some say stipends for liaisons and participants are necessary. Teaching is its own reward, and few people enter the field of education for the money, but for extra work there must be extra pay (Galligani, 1990).

- Liaisons based at the school and the university are important, serving in a variety of capacities: coordinators of efforts, supervisors of novices, channels of communication, and keepers of records (Lyons, 1995, and Colburn, 1993).

- Based on curriculum development rates in most districts, a stipend of approximately \$1,000 per year is the most effective incentive for school faculty to participate in a PDSs. Other incentives include release time, summer seminars for college credit, perks (library cards, access to special events, etc.), and professional recognition (Galligani, 1990).

On the other hand, Case, Norlander & Regan (1993) of the University of Connecticut detail the School of Education's policy decision to run a PDS not on contracts or grants, but on the existing resources of its faculty and student time.

- Permanent rather than soft, one-time sources of funds were sought, and a critical mass of the faculty now spend their time supervising students, working with school faculty on research projects, teacher teams on curriculum and instruction, or assisting in the planning of new programs.

III. Teacher Training

The literature suggest that even as the rewards of collaboration overcompensate for its difficulties, the potential of school-university partnerships to change actual teaching practices is not being realized. Goodlad and colleagues' Postulate #10 for professional development schools provides a guiding theme for this topic.

Programs for the education of educators must be characterized in all respects by the conditions for learning that future teachers are to establish in their own schools and classrooms (Goodlad, 1994).

Goodlad elaborates by calling for university faculty to demonstrate and exemplify best practice in their own teaching. Quality instructional content, a wide range of instructional materials, attention to the classroom environment, and other marks of good teaching should be evident in the teaching methods of the teacher educators. In a PDS the university professors must become better teachers of adults in order for the school teachers to become better teachers of children (Stoddart, 1993).

Along with collaboration between professionals with different priorities, this challenge may be one of the most daunting to professional development schools. At a fundamental level, it is one of the most daunting challenges of teacher education in general: teaching is hard, but it is even more difficult to teach people how to teach.

Weaknesses of Teacher Training

1. Inadequate Mentoring

A number of studies have found many weaknesses in the supervision and mentoring of novice teachers within existing professional development schools.

- Supervisory relations between veteran cooperating teachers and novices continue to be characterized by: student teachers rejecting or ignoring infrequent feedback from supervisors, school and university supervisors unwilling to be critical of novices,

evaluations based more on interpersonal skills than teaching ability, and cooperating teachers' inability to adequately communicate their pedagogical theories and skills to novices (Zeichner, 1992).

- Even in cases where novice teachers have much access to mentors, not enough modeling occurs to overcome the personal experience novices had with their childhood teachers. Advice and comfort can be helpful and soothing, but teachers will teach as they were taught. If the mentoring process means much fascinating dialogue and discourse, but little modeling of good teaching, its actual effect on practice will be less than desirable or possible (Kennedy, 1991).

- In one case, when mentor teachers met to discuss the progress of novices under their supervision, they were unwilling to discuss fundamental aspects of teaching. Some were afraid a novice's poor performance would reflect on their own supervisory capabilities (Kagan, 1993-94).

- In another case, mentor school teachers were impatient with efforts to have the novices reflect and philosophize about teaching and education. The mentor teachers were offended by difficult and challenging questions about teaching from novices and university faculty. The veteran teachers preferred that the rookies pay their dues and "learn the ropes." (Wintzky, Stoddart & O'Keefe, 1992).

- The same study also found university faculty also demonstrated an inability to model reflective practices, though they were experts at lecturing on the topic. In this particular example, university faculty set up a dichotomy between didactic (tell students what they need to know) and constructivist (enable students to use what they already know to discover things on their own) teaching and learning. The faculty then proceeded to use didactic methods to teach about the superiority of constructivist methods.

2. Isolation and Status

Some PDSs may not be addressing the isolation and low status which characterize the work of new teachers, and the work of supervising new teachers.

- Many PDSs ask novice teachers to reflect on their practice individually, not in groups. If a program is, in essence, the relationship between one novice, one mentor and one university professor, the novice may come to see important issues as unrelated to those of other teachers. Reflection as a social practice where "groups of teachers can support and sustain each other's growth" is almost non-existent (Zeichner, 1992).

- Student teachers are placed such that their attention is restricted almost exclusively to one classroom. The practicum in one classroom, working with only mentor, prevent novices from starting their job sensitive to issues affecting the whole school. Teacher education programs have ignored the capability of an entire staff to renew a school; educators have failed to join the reform of both schools and teacher education programs, in concept, in policy and in practice (Goodlad, 1990).

- Cooperating teachers are rarely compensated for added responsibilities of mentoring and supervision, either with fewer teaching periods, pay, or even recognition from the school or the university (Zeichner, 1992).

- Echoing the findings of the first section of this literature review, university supervisors have little incentive to do high quality work; the closer they get to working with teachers in the field, the less prestige and status they command within the university (Goodlad, 1990).

3. Raw Material

Two studies discussed not only deficiencies in the training and supervision of new teachers, but also in the academic, personal and professional skills new teachers bring to the profession.

- Teachers who hold undergraduate majors in a particular subject are often no more able to explain fundamental concepts in the discipline than other teachers. College-level courses often do not address the most fundamental or elementary concepts in the disciplines.

- In addition, the content of college courses is different from the content of K-12 classes (Kennedy, 1991). In math, for example, college majors go far beyond algebra, trigonometry and calculus. Thus, teaching these subjects in high school may be the first time a math-major-turned-math-teacher sees the subject since her own days in high school.

- Rare among the literature, one study focused on the response of teacher education programs to failure. Failure referred to a student teacher being, at the end of the program, unprepared academically, interpersonally or vocationally to assume the duties and responsibilities of a teacher. Most teacher education programs are unable to deal with such failure. Poor classroom management, poor initial grade placement, and mismatches between preservice teacher expectations and classroom realities were found to be the main reasons for failure (Sudzine & Knowles, 1993).

4. Diversity in Selection and Placement

A sprinkling of authors have discussed issues of social, economic and racial diversity in the selection of participating schools, the placement of novices into schools, and the training of novices in the area of multicultural education.

- In many PDSs, participating schools are not in settings characterized by high degrees of social, economic and ethnic diversity. The schools in which novices are placed do not have large minority student enrollments. They are not schools with high proportions of poor students who are most at-risk of education underachievement and failure. Because many student teachers come into teacher education programs with little intercultural and interracial experience, they tend to leave wanting to teach, and knowing how to teach, only students that look like themselves (Zeichner, 1992).

- In many cases the founders of PDSs have bypassed schools with student bodies that reflect great cultural, economic and ethnic diversity as sites for the training of novice teachers, even when one of the partners is an urban university (Goodlad, 1990 and Zeichner, 1992).

- The recruitment of more minority, particularly African-American and Latino, teachers into the ranks of the teaching profession is not a priority for most PDSs. As minority student enrollments grow, principally in urban areas, this omission will become more noticeable and critical (DeBolt, 1992).

- Teacher education courses designed to help teachers understand the cultures of various groups of students they may encounter in practice do not enhance teachers' ability to teach such children. Teachers learn general characteristics of native countries, racial and ethnic groups, but not concrete teaching techniques and strategies that enable them to address the academic needs of the children (Kennedy, 1991).

Improving Teacher Training

The literature contains a few examples of PDSs who have adequately addressed fundamental issues of teacher training discussed above.

- In one example of action research, the quality and usefulness of conferences between supervisors and novice teachers were examined. The research enabled supervisors to discover that almost half the time spent in such conferences was devoted to their commentary on the novice's work to date, rather than asking questions to enable the novices to reflect on their own work (Catelli, 1995).

- In one PDS a group of mentor teachers, led by a university faculty member, met regularly to discuss the progress of the novices under their supervision. The meetings enabled the mentor teachers to improve their supervisory skills and learn even more about teaching and education than they knew before (Kagan, 1993-94).

- Teacher education programs should help novice teachers internalize the disposition and learn the skills necessary to study their own practice and become better over time. Such programs should enable new teachers to become responsible for their own professional development (Zeichner, 1992).

- In one partnership, university biology professors outside the school of education worked with local school science teachers to improve science instruction (Bieda, Gibbs & Goldie, 1990). Though not addressed in the article, it is likely the partnership has allowed the partners to address the deficiency in undergraduate subject matter instruction cited above: fundamental concepts to be learned by elementary and secondary students are not taught in college-level subject matter classes (Kennedy, 1991). It is also likely the collaboration has enabled university faculty to improve their own teaching methods.

- One author has called for PDSs to place a greater emphasis on theories of child learning, psychology and cognition, and on teacher training that would enable teachers to focus on essential learning processes, not just lists of basic skills children must learn (Pechman, 1992).

- Only a handful of PDSs in the literature claimed to serve schools with primarily inner-city, poor and minority student enrollments (Catelli, 1995; Devaney, 1993; Lemlech, Hertzog-Foliat & Hackl, 1994; Stallings & Quinn, 1991).

Though the voices in the literature come from many different directions, with different biases and agenda, the fundamental point seems to be the same. As Marsha Levine has said in an important book on PDS reflecting the work of the American Federation of Teachers, "If one hopes to have teachers taught in different ways, one must change the way teachers are themselves taught." (Levine, 1992, p. 13).

IV. Funding

The literature on cost and financial issues regarding professional development schools is thin and fragmented. Some articles on an individual partnership will list various funding sources or financial arrangements, which vary widely because program elements and characteristics also vary. A few articles discuss funding issues or problems, but without great detail. In general it seems clear PDSs are identical to many other educational innovations of the past: without funding there is no program. It is also clear a PDS requires schools and universities to do extra work in addition to regular duties (meetings, supervision, etc.). This seems true even if collaboration calls for participants to revise and redefine current job descriptions. And to such a fundamental question as whether a professional development school costs more than it is worth, literature written by program participants will have only one answer: a PDS is a good thing that should be financially supported. Still, the question remains, where will the money come from?

In an occasional paper written for the Center for Education Renewal of the University of Washington, Theobald (1990) describes several key issues on the financing of PDSs.

- A PDS can save money by reducing central office costs and existing university supervision expenses; new costs will vary with the number of novices per PDS , and how hours are reallocated among personnel.
- Taxpayers may resent paying out-of-classroom personnel, or paying for the training of teachers who may then teach in some other district. Universities may not have the financial sophistication to handle public school budgeting problems such as special education restrictions.
- In another paper, Theobald (1991) adds that costs will vary with the number of hours made available for school teachers to mentor novices, and those made available for novices to meet in groups, including the cost of substitute teachers.

In both papers, Theobald advocates for the establishment of PDS governance and funding structures independent from but aligned with the school and the university.

In the first chapter of an important book, Darling-Hammond (1994) writes the caption for a picture already familiar to PDS participants: despite substantial moral support, the PDS movement has been launched with remarkably little funding, and the prospects for future support from foundations, universities, schools, state and federal government are limited at best.

- The Ford Foundation's support lasted only a few years; no major foundation has made a long-term commitment to these new initiatives, and federal or state support has been largely absent.

- Teacher education is less well supported by universities than are other programs. A PDS is a new venture that must be supported by college and university administrators at the highest levels.

- Some state agencies and foundations will fund certain projects and activities in schools, and others in universities, but less when the project is a partnership including both institutions.

In another chapter of the same book, Berry and Catoe (1994) point out the collaboration between various constituencies, the essence of a successful PDS, also makes seeking financial support difficult. Support must be sought from the highest administrative and policy levels of various institutions: school principals, district administrators, teacher union leadership, school boards, college deans, university presidents, university board of trustees, etc.

The Prospects for PDS Funding

In voicing the hope for institutionalizing PDSs, Darling-Hammond (1994) voices the hope of any good educational program: that states will begin to acknowledge such programs as essential elements of the infrastructure for reforming the education system.

An additional justification is that since states are responsible for licensing teachers, it is appropriate for them to assume financial responsibility for ensuring teachers are prepared and trained to do the job. Finally, Darling-Hammond points out the development of teaching hospitals to improve medical education and ensure an adequate supply of qualified health professionals was possible only with the financial support of the federal government.

In the same book, Darling-Hammond co-authors a final chapter with Sharon Robinson, Assistant Secretary, Office of Educational Research and Improvement (OERI), U.S. Department of Education. Probably as a result of this collaboration, Vaughan (1995) describes the launching of OERI competitions to fund partnerships and PDSs.

In an innovative example that most likely will remain an exception to the rule, I repeat here the University of Connecticut School of Education's policy decision to conduct a PDS, not on outside contracts or grants, but on the existing resources of its faculty and student time. The effort required an almost complete redefinition of the duties and responsibilities of all participants (Case, Norlander & Regan, 1993).

The most recent research on the financing of PDSs is being conducted by the Partner School Task Force of the National Network for Educational Renewal, chaired by Richard Clark. The following points are from previous papers by Clark, and a working paper that will be published in the fall of 1996 by the National Center for the Restructuring of Education, Schools and Teaching at Teachers College, Columbia University.

- Among many open questions are what will happen to existing teacher education programs once their work has been bettered or replaced by a PDS? Clark cites Goodlad (1994) as suggesting that the "old programs be sunsetted as an early stage in the reform effort." (Clark, 1996, p. 16).
- In many professions, candidates defer their earnings to pay for their training: candidates for law, medical or business degrees assume enormous debt burdens, counting

on future salaries to pay back the debt. How does this translate to PDSs if we know the salaries of teachers are far below those of other professions?

- Based on data from 28 PDSs in 10 states, the Partner School Task Force devised two distinct models of PDSs, with some overlapping elements of preservice education, staff development and inquiry activities, that yielded estimated costs of anywhere from about \$3,500 to almost \$7,000 per student teacher (Clark, 1996).

Clark ends the working paper with perhaps the most encapsulating statement on the future of PDS financing to date. Funds for PDSs "will have to be obtained during a time of limited public willingness to support education and during a time when the professional development school, while popular with advocates of reforming teacher education, still has not been accepted as a strategy that will produce better preservice, staff development, and school renewal than can be obtained through traditional approaches." (Clark, 1996, p. 18).

Clark concludes the survival of PDS will rely on the reallocation of funds through the sunsetting of existing programs, and the shifting of more money from a variety of sources to teacher education. School districts will have to invest larger shares in the operation of PDSs, and to do so the value and benefit of PDSs will have to be more clear and definite than available to date.

V. Evaluation

Since 1990, the literature on PDSs that focuses on their evaluation has been scarce. Most programs mention evaluation briefly in an article or paper about a particular PDS. From one vantage point, that this is done at all is surprising. One of the principal elements of a PDS is participants' reflecting on their own work. To evaluate a PDS would require reflection on this process of reflection. And for the evaluation to be the subject of an article

or paper would require reflecting on the process of reflecting on a program based on reflection. The challenge is obvious.

On the other hand, the act of writing about the positive and negative experiences of a PDS constitutes a form of evaluation. From this vantage point, almost all pieces of literature on PDSs, in particular those describing a particular PDS, are evaluations. The weakness of this form of evaluation is that only those who research and write the article go through the full process of evaluation. It is unclear how many of the actual participants read the article, report, or book about their own PDS, or how much they contribute to its writing.

In 1993, Education Week (Bradley, 1993) reported on an effort to clarify definitions of professional development schools, spearheaded by the National Center for Restructuring Education, Schools, and Teaching (NCREST) at Teachers College. With a grant from the Danforth Foundation, the effort involved representatives of the Holmes Group, the Center for Educational Renewal, both national teacher's unions, and the American Association of Colleges for Teacher Education. Though a report and a commitment to build a network of networks were ostensibly the end products of the effort, the actual discussions constituted an informal national evaluation of PDSs.

In a 1990 review of the literature on school-university collaborations, Su discussed the goals for the process of evaluating PDSs: evaluation as an ongoing and substantive element of a partnership. Partnerships should engage in their own evaluative self-study through a process of collaborative inquiry. A number of quantitative, qualitative and critical methods should be used: qualitative surveys, interviews, and observation that can yield quantifiable data; review of archival documents, and rigorous and structured discourse between PDS partners (Su, 1990). Su based the concepts on principles developed by Kenneth Sirotnik, John Goodlad, and other colleagues in the Center for Educational Renewal, University of Washington. Sirotnik, Goodlad and others had been successful in having members of the National Network for Educational Renewal (NNER)

adopt this new evaluation paradigm. An addition to the paradigm had been evaluation of PDSs according to their understanding of and progress on each of nineteen postulates (Goodlad, 1990).

In 1990, NNER members were poised to implement this new evaluation paradigm. But in a 1994 book presumably based on the experience of NNER members, Goodlad put forth a sobering assessment of inadequate and misleading evaluations conducted by PDSs. Reflecting on each of the postulates had produced two types of evaluations. At one extreme was the "superficial, non-data-based persual leading to the conclusion that all is well," largely due to insufficient and fragmented time spent on evaluation. At the other extreme was the "prolonged self-analysis leading to a detailed, comprehensive report divorced from action." The participants had been worn-out by the process, and the end results was an impressive report placed on many shelves but read by few (Goodlad, 1994, p. 94-5).

Examples of Evaluation

The literature contains a few examples of interesting PDS evaluation efforts.

- An important volume authored by Galligani (1990) includes the methodology and results of two evaluation cycles of projects funded by the California Academic Partnership Program (CAPP) in the 1980s. The first part covers evaluations from 1984-87, and was included in a 1990 literature review on PDSs by Su. The 1990 volume includes the first part and a second part discussing evaluations from 1987-90. The volume contains an extensive evaluation model for PDSs, including detailed questionnaires and surveys, and agendas for evaluation sessions.
- The seventh chapter of a handbook on developing PDSs (Gomez, Bissell, Danziger, & Casselman, 1990) was also cited by Su (1990), and remains an excellent model for the evaluation of PDSs. It includes discussions of internal vs. external

evaluations, routine and institutionalized evaluation activities, assessing changes in expectations and attitudes, and measuring long-term and sustained impacts.

- The third Holmes Group report, *Tomorrow's Schools of Education* (1995), set standards for the evaluation of PDSs.
- The 1992 *Handbook of Research on Teacher Education*, edited by Houston, Haberman and Sikula, contains a chapter on evaluation. While the work of many researchers and evaluators is cited, the chapter demonstrates "the serious problems in conceptualizing and conducting program evaluations." (Geer and Gideonse, 1992, p. 58.)
- Rare in the literature, the evaluation of two PDSs includes the academic achievement and progress of the students taught by novice teachers (Devaney, 1993; Stallings & Quinn, 1991). Others have written that achievement testing and other forms of diagnostic evaluation are inadequate for professional development schools (Woloszyk & Davis, 1992, p. 44).
- The report by the Task Force on PDSs, sponsored by the Association of Colleges and Schools of Education in State Universities and Land Grant Colleges (and Affiliated Private Universities), contains an excellent and interesting list of questions to be included in an evaluation of any PDS (Ishler, 1995, p. 58-59).

VI. Literature on the Horizon

Rather than conclude with a synthesis of this literature review, itself a set of syntheses of the research of others, I end with a look at some upcoming literature.

- The National Council on Accreditation of Teacher Education (NCATE) in Washington, D.C., has produced a literature review on PDSs which it hopes to publish later this year. Marsha Levine, whose seminal articles and books are cited in this literature review, commissioned Lee Teittel of the University of Massachusetts at Boston to write the

paper. The review is part of a larger effort, chaired by Levine, to produce standards for professional development schools. Draft standards are expected for February 1997.

- The National Center for the Restructuring of Education, Schools and Teaching (NCREST), based at Teachers College, Columbia University, is at work on a set of papers on various aspects of the professional development schools movement, to be published by the Fall of 1996. The topics include research, standards, equity, finance and institutionalization of PDSs.

These efforts will constitute substantive contributions to our understanding of professional development schools.

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